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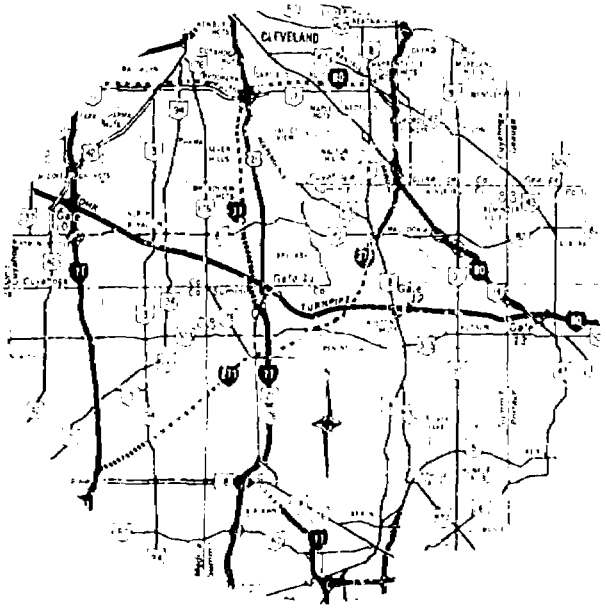
ABSTRACT

This first volume of a four-volume report on highway safety activities describes the relevant federal laws, provides descriptions, projects safety specialist manpower needs and supply through 1977, and evaluates the adequacy of training capacity. Field visits were made to each state to gather state estimates, as well as maximum and minimum requirements of future manpower needs. The findings show that present employment falls short of the minimum and will surpass the minimum only slightly by 1977. Volumes II-IV are available as VT 013 313-013 315 in this issue. (BH)

EXPANSION OF VOCATIONAL-TECHNICAL PROGRAMS TO ACCOMMODATE HIGHWAY SAFETY MANPOWER REQUIREMENTS



Introduction
Volume I

THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION
THE OHIO STATE UNIVERSITY

EXPANSION OF VOCATIONAL-TECHNICAL SCHOOL PROGRAMS TO ACCOMMODATE HIGHWAY SAFETY MANPOWER REQUIREMENTS

VOLUME I

DIRECTIONS

This is Volume I of four volumes. Please read each section carefully. After reading the volume please complete and return the enclosed evaluation form. This form will be found on the last two pages of the unit (Appendix B).

Expansion of Vocational-Technical School Programs to Accommodate Highway Safety Manpower Safety Requirements.

Volume I

Introduction

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GENERAL INFORMATION*

HIGHWAY SAFETY AND MOTOR VEHICLE ACTS OF 1966

The current basic legislation underlining all highway safety activities at the federal, state, and local levels is contained in two laws; the National Traffic and Motor Vehicle Safety Act and the Highway Safety Act of 1966.

Public Law 89-563 (7) promulgated on September 9, 1966, and titled the "National Traffic and Motor Vehicle Safety Act" has as its main purpose the reduction of traffic accidents, deaths, and injuries to persons resulting from traffic accidents. Congress has determined that it is necessary to establish safety standards for motor vehicles and equipment in interstate commerce, undertake and support necessary safety research and development, and expand the national driver register.

Section 106(a) states that the Secretary of Transportation is authorized to conduct research, testing, development, and training by making grants (for the conduct of such research, testing, development, and training) to state, interstate agencies, and non-profit institutions.

Public Law 89-564 (8) the Highway Safety Act, issued on September 9, 1966, requires that each state have a highway safety program (approved by the Secretary of Transportation) designed to reduce traffic accidents, injuries, and property damages. Such programs, conforming to standards promulgated by the Secretary are to improve driver performance (including driver education, driver testing to determine proficiency to operate motor vehicles, physical and mental examinations), driver licensing, and pedestrian performance. Among the standard requirements set by the Secretary of Transportation for highway programs in each state are provisions for an effective record system of accidents (including injuries and post-accident deaths), accident investigations to determine probable causes, registration, operation, inspection, highway design and maintenance (including lighting, markings, and surface treatment), traffic control, vehicle codes and laws, surveillance of traffic for detection and correction of high or potentially high accident locations, and emergency services.

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*Parts of this section were taken from *The Feasibility of Establishing Highway Safety Manpower Development and Research Centers at University-Level Institutions* by the Stanford Research Institute, prepared for National Highway Safety Bureau, Department of Transportation, Washington, D.C., pp. 311-3 7.

Under Section 402 of the Act, matching funds are to be apportioned to states; 75 percent of the funds based on population, 25 percent apportioned by special formula developed by the Secretary.

The Highway Safety Act provides that at least 40 percent of all federal funds apportioned under Section 402 to a state for any fiscal year will be extended by the political subdivisions of the state carrying out authorized local highway safety programs.

The Act provides funds for comprehensive driver training programs, including: 1) the initiation of a state program for driver education in the school systems or for significant expansion and improvement of such programs already in existence, to be administered by appropriate school officials under the supervision of the governor; 2) the training of qualified school instructors and their certification; 3) appropriate regulation of other driver training schools, including licensing of the schools and certification of the instructors; 4) other driver training programs for the retraining of selected drivers; and 5) other research, development, and procurement of practice driving facilities, simulators, and other similar teaching aids for both secondary school and other driver training programs.

The Secretary of Transportation is authorized to use funds appropriated under Section 403 to carry out safety research. This means grants may be awarded: 1) to state or local agencies, institutions, and individuals for training of highway safety personnel; 2) for highway safety research fellowships; 3) for improved accident investigations procedures; 4) emergency service plans; 5) demonstration projects; and 6) related activities that are deemed by the Secretary to be necessary. Monies appropriated under Section 403 are 100 percent federal funds.

AMENDMENTS TO THE HIGHWAY SAFETY AND MOTOR VEHICLE ACTS OF 1966

Amendments to the Highway Safety and Motor Vehicle Acts are currently under consideration and are found in two bills, H.R. 19504 (9) and its Senate companion, S. 4260. Proposed amendments include:

1. National Highway Institute--The Secretary is authorized and directed to establish and operate in the Federal Highway Administration a National Highway Institute. The Institute shall develop and administer training programs of instruction for Federal Highway Administration and state and local highway department employees engaged or to be engaged in federal-aid highway work. Such programs may include, but not be limited to, courses in modern developments, techniques, and procedures,

relating to highway planning, environmental factors, acquisition of right-of-way, engineering, construction, maintenance, contract administration, and inspection.

2. Highway Safety--There will be established within the Department of Transportation a National Highway Traffic Safety Administration. This administration shall carry out those provisions of the Highway Safety Act of 1966 for highway safety programs, research, and development relating to uniform standards which the Secretary is authorized to promulgate pertaining to highway design, construction, and maintenance, traffic control devices, identification and surveillance of accident locations, and highway-related aspects of pedestrian safety.

On October 15, 1966, Public Law 89-670 established the Department of Transportation. The Department has three main agencies; the FRA (Federal Railroad Administration), the FAA (Federal Aviation Administration), and the FHWA (Federal Highway Administration).

The provisions of the Highway Safety Act of 1966 are carried out by the NHSB (National Highway Safety Bureau), which is established under the FHWA and headed by a director appointed by the President, by and with the advice and consent of the Senate.

Within the NHSB, there is a National Safety Institute to conduct or sponsor such research, development, testing, and evaluation projects as needed by the NHSB to develop uniform standards for state highway safety programs and, as needed, to develop federal motor vehicle safety standards and a uniform quality grading system for motor vehicle tires, and assist other components of the NHSB, at their request, in administering or enforcing the provisions of the National Traffic and Motor Vehicle Safety Act and the Highway Safety Act of 1966. The Institute also establishes and maintains demonstration projects to facilitate improved safety technology in state and community highway safety programs as quickly as practical; conducts or sponsors education and training programs to increase manpower to implement traffic safety programs; develops, evaluates, and assimilates traffic safety statistics; acquires and maintains traffic safety documents; and performs related work. The Institute, investigates the need for facilities to conduct research, development, and testing in traffic safety.

Within the National Safety Institute, an Office of Safety Manpower Development was established to increase the supply and improve the skills of manpower required to implement effective highway and traffic safety programs at the federal, state, and local levels. Methods for achieving this goal are training for technicians and specialists in various program areas; short-courses and a degree program for the preparation and advancement

of management and professional personnel; and pre-doctoral and post-doctoral fellowship programs for safety research workers and research administrators.

The Office of Safety Manpower Development plans, initiates, and manages programs to improve the qualities and increase the quantity of all classes of highway safety manpower at all levels in the nation's government, institutional and public stratas. This office has the overall management responsibility and authority to perform the following functions:

- Ascertain the current status of and need for highway safety professional, technical and research manpower at the state, federal, county, and municipal levels.
- Identify professional competence required for each category of safety manpower and develop curricula for training safety manpower throughout the nation.
- In conjunction with other federal agencies, professional organizations, societies and associations, recommend national policies and priorities for the development of highway safety manpower.
- Develop criteria and evaluation for curriculum to ensure the adequate selection, training, and education of highway safety manpower and the maintenance of competence for each category of required manpower.
- Promote research and the application of research results to improve the contents of the educational programs.
- Develop comprehensive skill measurements to aid in the training of all categories of highway safety manpower.
- Conduct or sponsor short-courses, training schools, pilot programs, pre-doctoral and post-doctoral fellowships in the highway safety field.
- Develop appraisal techniques to identify weaknesses in safety manpower teaching and preparation. Initiate procedures to analyze, evaluate, and translate research findings into improved programs within the traffic safety spectrum.
- Establish effective channels of communication among educational institutions, private research organizations, research foundations, and other groups interested in highway safety research.
- Establish and maintain lines of communication with the National Highway Safety Programs Service and the National

Motor Vehicle Safety Performance Service regarding manpower quality and quantity.

- Coordinate with other federal agencies engaged in operating or supporting manpower development programs.
- Consult with and advise the Highway Safety Programs Service and the Motor Vehicle Safety Performance Service on safety manpower development matters.
- Serve on national educational and safety committees, participate in safety and education conferences, and contribute to the professional development of safety manpower.
- Represent the NHSB on matters of professional and national interest in the safety manpower field.

HIGHWAY SAFETY MANPOWER REQUIREMENTS

The following quote from the chief counsel's statement at Congressional Hearings on July 15, 1966, is only one citation of the shortages of safety manpower existing in this country:

> Manpower shortage--competent inspection personnel will be in short supply; mediocre inspection personnel will be worse than none at all. Automobile manufacturers maintain training schools for the service departments and the dealerships. It should be possible to establish similar training schools for vehicle inspection personnel, staffed by competent automotive engineers. This could be established on a regular basis, with operating costs shared by the states within the service area.

A severe nationwide shortage of trained manpower exists in all safety technician and professional categories. An intensive national education and training effort is needed to bridge these gaps and to keep abreast of the manpower requirements for initiating and sustaining highway safety programs necessary to implement the two Acts of 1966.

CATEGORIES OF HIGHWAY SAFETY MANPOWER

There are four basic categories of highway safety manpower: research manpower--post-doctoral, research manpower-doctoral, professional manpower, and technical manpower.

Representative of the first category are research administrators and traffic safety researchers of many disciplines. In the

second category are doctoral research manpower, mainly multi-disciplinary traffic safety researchers.

Professional manpower includes traffic engineers, traffic safety program managers, driver education teachers, automotive engineers, and driver education supervisors.

In the technical manpower category are motor vehicle inspectors, driver license examiners, law enforcement officers, accident investigators, accident analysts, accident data processing specialists, emergency medical specialists, traffic court personnel, and instructors within these specialties.

The educational requirements for the first two groups are the Ph.D. or D.S. degree; for the professional manpower, the M.S. or B.S. degree, and supplementary short-courses required to upgrade practitioners at this level. The latter category requires a junior college Associate Degree or non-degree short-courses given at vocational or technical schools, high school vocational programs, or on-the-job apprentice-type programs.

ACCOMPLISHMENTS TO DATE

A number of studies and surveys have been conducted in the last few years. The Office of Safety Manpower Development has sponsored several studies to identify manpower needs and training and education requirements in the highway safety field. Most noteworthy is a survey of safety specialist manpower needs at the state level by Booz-Allen and Hamilton, Inc. (1) published in September, 1968. This report identifies safety specialist manpower requirements in 50 states and projects this need ahead 10 years on a year-by-year basis. It consists of a comprehensive inventory of all existing state highway safety positions and those projected for the future. To provide a comparative basis, all position titles were translated into 36 composite occupations based on similar training requirements, for instance, state highway safety director, traffic engineer, school bus driver, driver education teacher and accident investigator.

Subsequently, Booz-Allen and Hamilton, Inc. issued a report during October, 1968 (6, pp. 49-54) containing estimates of the number of specialists needed to fill all local (county and city) highway safety positions and projecting these estimates five and 10 years.

A second study of highway safety manpower needs was conducted during FY 1970 by the National Association of Counties. This unpublished (3) survey identified safety manpower required at the local (county and city) level and projected these requirements for 10 years.

A study entitled *Safety Research Manpower* (5), prepared by the University of North Carolina Highway Safety Research Center in June, 1968, resulted in a tentative post-graduate curriculum for highway safety research manpower training. The study utilized existing capabilities of four campuses at the University of North Carolina.

Somewhat related to the research manpower requirement is a report entitled *Facility Requirements for the National Traffic Safety Research Center* (2), prepared by TEMPO, a Division of General Electric Company, in cooperation with Stanford Research Institute and Bechtel. The report was published in October, 1967.

The Automotive Safety Foundation held regional safety management seminars, in August, 1968, for state managers of safety-related programs.

The high points of three reports on highway safety manpower have been selected by the authors as significant current material on the subject. The first report is *Safety Specialist Manpower*.

SAFETY SPECIALIST MANPOWER REQUIREMENTS*

PURPOSE

This report presents information relevant to state safety manpower.

-- Manpower requirements (number and types of personnel needed)

-- Manpower resources (availability of personnel to fill requirements)

-- Manpower training capacity (availability of training to prepare manpower resources to fill requirements)

-- Manpower staffing actions (steps to assure properly trained highway safety personnel)

METHODOLOGY

1. Establishing initial framework for study--officials of more than a dozen organizations concerned with highway safety and safety manpower were interviewed.

2. Based on these interviews, questionnaires were constructed and guides developed.

3. Data for safety requirements and programs were gathered from on-site visits to 50 states.

LIMITATIONS

Only state personnel with technical knowledge of highway safety principles and practices are included in this study. Excluded are clerical, data processing personnel and highway engineers performing conventional engineering duties.

MANPOWER REQUIREMENTS

Three varying estimates of manpower requirements are presented:

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*Abstracted from Booz-Allen and Hamilton, Inc., *Safety Specialist Manpower*, Washington, D.C.: The National Highway Safety Bureau, U.S. Department of Transportation, 1968.

-- The State Estimate, provided by state officials during the field visits. The 1968 State Estimate represents actual employees assigned to safety specialists jobs that year (6).

-- The Maximum Estimate calculated (by Booz-Allen and Hamilton, Inc.) based on field visits, and on evolving program guidance in the National Highway Safety Bureau.

-- The Minimum Estimate calculated (by Booz-Allen and Hamilton, Inc.) based on National Highway Safety Program Standards.

State manpower requirements over the next decade should fall within the range of these alternatives.

The following is an example of how the maximum and the minimum are computed for the occupation, "Motor Vehicle Inspector" (1, pp. D3-D4).

MOTOR VEHICLE STATION INSPECTOR

Maximum Estimate--This alternative provides for state supervision of private inspection stations. It assumes 500 vehicles per station, 20 hours of supervisory time devoted annually to each station, dedicated manpower, and supervisory activities conducted evenly for 12 months of the year. Two levels of supervision allow for branch office operations with one supervisor for every 10 subordinates.

Base:

$$\frac{\text{1968 state registered vehicles} \times \text{20 hours annually per station}}{\text{500 vehicles per station} \times \text{2,000 hours per work year}}$$

This equals working level personnel. Add one first level supervisor for every 10 workers, and add one second level supervisor for every 10 first level supervisors.

Growth:

Each year's manpower increased by the average annual growth in registered vehicles in the state equals the next year's manpower.

Minimum Estimate--This alternative provides for state supervision of private inspection stations. It assumes

600 vehicles per station, 10 hours of supervisory time devoted annually to each station, dedicated manpower, and supervisory activities conducted evenly for 12 months of the year. Two levels of supervision allow for branch office operations with one first level supervisor for every 15 workers and one second level supervisor for every 10 first level supervisors.

Base:

$$\frac{\text{1968 state registered vehicles x 10 hours annually per station}}{\text{600 vehicles per station x 2,000 hours per work year}}$$

This equals working level personnel. Add one first level supervisor for every 15 workers, and add one second level supervisor for every 10 first level supervisors.

Growth:

Each year's manpower increased by the average annual growth in registered vehicles in the state equals the next year's manpower.

GENERAL FINDINGS AND OBSERVATIONS

1. The State Estimate indicates that about 65,000 safety specialists are employed in 1968 and that about 95,000 (will be) required in 1977.

2. The State Estimate is below the minimum alternative by 8,000 people in 1968.

3. Booz-Allen and Hamilton, Inc. estimate a minimum requirement of about 87,000 state safety specialists in 1977 and a maximum requirement of about 250,000 that year.

The following tables show estimates of highway safety manpower needs. Table I (Exhibit I) is based on State Estimate. Table II (Exhibit II) demonstrates the Maximum Estimate (Alternative 1). Table III (Exhibit III) demonstrates the Minimum Estimate (Alternative 2). Table IV (Exhibit IV) shows comparison of total alternative manpower requirements.

TABLE I

EXHIBIT I

National Highway Safety Bureau
U. S. Department of Transportation

STATE ESTIMATE--
NATIONAL SUMMARY BY PROGRAM

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Planning and Administration	129	142	161	164	170	173	175	179	179	179
Periodic Motor Vehicle Inspection (Motor Vehicle Inspector)	1,142	1,164	1,170	1,199	1,214	1,232	1,247	1,249	1,252	1,252
Periodic Motor Vehicle Inspection (Motor Vehicle Station Inspector)	1,092	1,360	1,473	1,546	1,643	1,738	1,806	1,874	1,876	1,878
Motorcycle Safety	30	30	30	30	30	30	30	30	30	30
Driver Education	26,350	28,546	31,359	31,929	32,497	33,067	33,656	34,211	34,232	34,252
Driver Licensing	5,091	6,017	6,557	6,776	6,967	7,135	7,290	7,408	7,454	7,470
Codes and Laws	22	24	24	24	24	24	24	24	24	24
Traffic Courts	149	274	363	371	374	380	387	393	393	393
Alcohol in Relation to Highway Sa	826	884	903	919	934	949	964	982	982	982
Identification and Surveillance of Accident Locations	272	385	465	480	491	502	510	520	520	520
Traffic Records	80	80	92	92	93	93	93	97	97	97
Emergency Medical Services	95	116	127	127	128	128	129	131	131	131
Highway Design, Construction, and Maintenance	1,422	1,554	1,691	1,730	1,752	1,776	1,814	1,848	1,850	1,352
Traffic Control Devices	986	1,101	1,206	1,235	1,276	1,304	1,337	1,373	1,384	1,384
Pedestrian Safety	15	17	18	18	18	18	18	18	18	18
Police Traffic Services	27,143	32,534	36,566	38,127	39,524	41,000	42,569	43,934	44,126	44,215
Accident Cleanup	42	50	56	62	68	70	70	70	70	70
School Bus Safety	385	312	330	336	353	362	375	389	389	389
Total	65,171	74,590	82,591	85,165	87,556	89,981	92,494	94,730	95,007	95,136

TABLE II

EXHIBIT II

National Highway Safety Bureau
U. S. Department of Transportation

ALTERNATIVE 1 (MAXIMUM) ESTIMATE--
NATIONAL SUMMARY BY PROGRAM

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Planning and Administration	306	308	308	308	312	315	316	316	317	321
Periodic Motor Vehicle Inspection (Motor Vehicle Station Inspector)	2,275	2,377	2,469	2,575	2,687	2,803	2,924	3,061	3,191	3,330
Motorcycle Safety	1,376	1,844	2,487	3,350	4,493	4,698	4,961	5,121	5,346	5,586
Driver Education	26,038	27,365	28,726	30,463	32,084	33,278	34,999	36,781	38,101	40,070
Driver Licensing	13,857	14,406	15,111	15,673	16,363	17,082	17,835	18,624	19,453	20,328
Codes and Laws	136	136	136	136	136	136	136	136	136	136
Traffic Courts	2,054	2,083	2,111	2,146	2,176	2,211	2,257	2,279	2,316	2,352
Alcohol in Relation to Highway Safety	15,353	15,574	15,801	16,919	16,269	16,441	16,762	17,014	17,508	17,772
Identification and Surveillance of Accident Locations	5,441	5,474	5,525	5,558	5,605	5,654	5,694	5,733	5,778	5,818
Traffic Records	422	422	422	422	422	422	422	422	422	422
Emergency Medical Services	693	697	706	712	720	732	743	754	762	775
Highway Design, Construction, and Maintenance	8,142	8,220	8,272	8,302	8,340	8,374	8,408	8,443	8,471	8,517
Traffic Control Devices	6,399	6,444	6,502	6,547	6,628	6,673	6,721	6,769	6,818	6,874
Pedestrian Safety	67	67	67	67	69	69	69	69	69	69
Police Traffic Services	115,240	116,121	116,914	117,734	118,569	119,382	120,197	121,028	121,844	123,692
Accident Cleanup	9,372	9,600	9,792	9,820	9,986	10,116	10,242	10,374	10,512	10,613
School Bus Safety	1,060	1,088	1,122	1,157	1,186	1,220	1,265	1,304	1,344	1,384
Total--Based on Assumption All States Use Motor Vehicle Station Inspector	208,231	212,306	216,471	220,889	226,045	229,606	233,951	238,228	242,388	248,052
Less: Periodic Motor Vehicle Inspection (Motor Vehicle Station Inspector)	2,275	2,377	2,469	2,575	2,687	2,803	2,924	3,061	3,191	3,330
Add: Periodic Motor Vehicle Inspection (Motor Vehicle Inspector)	28,404	29,628	30,914	32,262	33,672	35,156	36,716	38,345	39,863	41,867
Total--Based on Assumption All States Use Motor Vehicle Station Inspector	234,360	239,557	244,916	250,576	257,030	261,959	267,743	273,512	279,060	286,596

TABLE III

EXHIBIT III

National Highway Safety Bureau
U. S. Department of Transportation

ALTERNATIVE 2 (MAXIMUM) ESTIMATE--
NATIONAL SUMMARY BY PROGRAM

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Planning and Administration	171	172	172	172	173	176	177	177	177	180
Periodic Motor Vehicle Inspection (Motor Vehicle Station Inspector)	911	949	990	1,034	1,086	1,128	1,183	1,231	1,286	1,367
Motorcycle Safety	419	547	759	985	1,328	1,381	1,445	1,508	1,581	1,650
Driver Education	14,007	14,565	15,222	15,891	16,619	17,385	18,207	19,068	19,979	20,942
Driver Licensing	3,051	3,182	3,352	3,528	3,714	3,885	4,055	4,236	4,427	4,612
Codes and Laws	50	50	50	50	50	50	50	50	50	50
Traffic Courts	1,388	1,395	1,424	1,449	1,458	1,499	1,508	1,526	1,550	1,583
Alcohol in Relation to Highway Safety	2,201	2,227	2,256	2,286	2,319	2,354	2,385	2,418	2,463	2,506
Identification and Surveillance	2,511	2,512	2,540	2,563	2,581	2,604	2,622	2,636	2,660	2,681
Traffic Records	150	150	150	150	150	150	150	150	150	150
Emergency Medical Services	257	258	259	261	264	270	275	277	281	281
Highway Design, Construction, and Maintenance	2,374	2,374	2,378	2,403	2,410	2,439	2,450	2,457	2,482	2,494
Traffic Control Devices	1,790	1,791	1,796	1,085	1,812	1,841	1,853	1,864	1,883	1,902
Pedestrian Safety	50	50	50	50	50	50	50	50	50	50
Police Traffic Services	39,204	39,353	39,751	40,027	40,304	40,585	40,872	41,157	41,452	41,738
Accident Cleanup	3,751	3,839	3,858	3,937	3,971	4,036	4,084	4,133	4,182	4,245
School Bus Safety	591	594	603	618	632	645	655	670	681	688
Total--Based on Assumption All States Use Motor Vehicle Station Inspectors	72,876	74,008	75,610	77,209	78,921	80,478	82,021	83,608	85,334	87,119
Less: Periodic Motor Vehicle Inspection (Motor Vehicle Station Inspector)	911	949	990	1,034	1,086	1,128	1,183	1,231	1,286	1,367
Add: Periodic Motor Vehicle Inspection (Motor Vehicle Inspection)	9,192	9,587	10,001	10,437	10,829	11,347	11,877	12,404	13,228	13,537
Total--Based on Assumption All States Use Motor Vehicle Inspector	81,157	82,646	84,621	86,612	88,664	90,697	92,715	94,781	97,276	99,289

TABLE IV

EXHIBIT IV

National Highway Safety Bureau
U. S. Department of Transportation

COMPARISONS OF TOTAL ALTERNATIVE MANPOWER REQUIREMENTS*

	1968	1977	Difference
Alternative 1 Estimate	208,231	248,059	39,828
State Estimate	65,171	95,136	29,965
Difference	143,060	152,923	
Alternative 2 Estimate	72,876	87,119	14,243
State Estimate	65,171	95,136	29,965
Difference	7,705	(8,017)	

* Alternative 1 and Alternative 2 Estimates are based upon the assumption that all states use Motor Vehicle Station Inspectors rather than Motor Vehicle Inspectors.

Booz-Allen and Hamilton, Inc. have further divided the manpower requirements into specific occupations within the Highway Safety Program Standards. These manpower requirements, each showing state, Alternative 1, and Alternative 2 estimates are shown in Tables V through X.

TABLE V

STATE NATIONAL

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Planning and Administration										
Governor's Highway Safety Program Director										
- State	50	50	50	50	50	50	50	50	50	50
- Alternative 1	50	50	50	50	50	50	50	50	50	50
Highway Safety Program Analyst										
- State	46	54	58	59	63	64	64	66	66	66
- Alternative 1	195	196	196	196	200	202	203	203	204	206
- Alternative 2	96	96	96	96	97	99	100	100	100	102
Highway Safety Public Information Officer										
- State	33	38	53	55	57	59	61	63	63	63
- Alternative 1	51	62	62	62	62	63	63	63	63	65
- Alternative 2	25	26	26	26	26	27	27	27	27	29
Inspection										
Motor Vehicle Inspector	1,142	1,164	1,170	1,199	1,214	1,232	1,247	1,249	1,252	1,252
- State	28,404	29,628	30,911	32,262	33,672	35,156	36,716	38,345	39,863	41,867
- Alternative 1	9,192	9,587	10,001	10,437	10,829	11,347	11,877	12,404	13,228	13,537
- Alternative 2										
Motor Vehicle Station Inspector										
- State	1,092	1,360	1,473	1,546	1,643	1,738	1,806	1,874	1,376	1,878
- Alternative 1	2,275	2,377	2,469	2,575	2,687	2,803	2,924	3,061	3,191	3,330
- Alternative 2	911	949	990	1,034	1,086	1,128	1,183	1,231	1,286	1,367
Motorcycle Safety										
Motor Vehicle Inspector										
- State	0	0	0	0	0	0	0	0	0	0
- Alternative 1	766	1,029	1,394	1,881	2,520	2,637	2,746	2,860	2,986	3,122
- Alternative 2	292	377	526	685	917	955	1,000	1,041	1,091	1,140
Driver License Examiner										
- State	30	30	30	30	30	30	30	30	30	30
- Alternative 1	610	815	1,093	1,469	1,973	2,061	2,215	2,261	2,360	2,464
- Alternative 2	127	170	233	300	411	426	445	467	490	510

TABLE VI

STATE NATIONAL

	1968	1969	1970	1971	1972	1973	1974	1975	1076	1977
Driver Education										
Driver Training Program Specialist										
- State	121	151	170	172	174	175	175	188	188	188
- Alternative 1	457	457	457	457	457	457	457	457	457	457
- Alternative 2	200	200	200	200	200	200	200	200	200	200
Driver Education Supervisor										
- State	35	219	228	229	239	248	258	264	264	264
- Alternative 1	3,361	3,361	3,361	3,361	3,361	3,361	3,361	3,361	3,361	3,361
- Alternative 2	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063
Driver Education Teacher										
- State	25,854	27,830	30,605	31,149	31,691	32,239	32,805	33,327	33,348	33,368
- Alternative 1	19,009	20,200	21,414	22,999	24,459	25,483	27,034	28,649	29,753	31,519
- Alternative 2	8,872	9,427	9,991	10,573	11,213	11,888	12,600	13,359	14,161	15,013
Driver Retraining Instructor										
- State	340	346	356	379	393	405	418	432	432	432
- Alternative 1	3,211	3,347	3,494	3,646	3,807	3,977	4,147	4,314	4,530	4,733
- Alternative 2	1,872	1,875	1,968	2,055	2,143	2,234	2,344	2,446	2,555	2,666
Driver Licensing										
Driver License Examiner	4,780	5,690	6,205	6,411	6,590	6,748	6,892	6,999	7,045	7,061
- State	12,787	13,370	13,946	14,459	15,094	15,755	16,448	17,180	17,942	18,755
- Alternative 1	2,703	2,832	2,977	3,132	3,305	3,455	3,608	3,762	3,932	4,104
- Alternative 2										
Driver License Hearing Officer										
- State	311	327	352	365	377	387	398	409	409	409
- Alternative 1	1,070	1,116	1,165	1,214	1,269	1,327	1,387	1,444	1,511	1,575
- Alternative 2	348	350	375	396	409	430	447	474	496	508
Codes and Laws										
Codes and Laws Program Specialist										
- State	24	24	24	24	24	24	24	24	24	24
- Alternative 1	136	136	136	136	136	136	136	136	136	136
- Alternative 2	50	50	50	50	50	50	50	50	50	50

TABLE VII

STATE NATIONAL

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Traffic Courts										
Traffic Court Judges										
- State	136	261	350	358	361	367	374	380	380	380
- Alternative 1	2,004	2,033	2,061	2,096	2,126	2,161	2,207	2,229	2,266	2,302
- Alternative 2	1,338	1,345	1,374	1,399	1,408	1,449	1,458	1,476	1,500	1,533
Traffic Court Program Specialist										
- State	13	13	13	13	13	13	13	13	13	13
- Alternative 2	50	50	50	50	50	50	50	50	50	50
Alcohol										
Alcohol Technical Specialist										
- State	26	40	41	41	41	41	41	41	41	41
- Alternative 1	298	300	302	305	308	316	319	323	332	337
- Alternative 2	195	195	196	196	199	202	202	207	216	229
Breath Examiner Specialist										
- State	800	844	862	878	893	908	923	941	941	941
- Alternative 1	15,055	15,274	15,409	15,614	15,961	16,125	16,443	16,691	17,176	17,435
- Alternative 2	2,006	2,032	2,060	2,090	2,120	2,152	2,183	2,211	2,247	2,277
Identification and Surveillance										
Accident Site Investigator										
- State	175	246	280	291	299	308	314	321	321	321
- Alternative 1	3,261	3,287	3,312	3,333	3,365	3,392	3,418	3,444	3,472	3,494
- Alternative 2	1,474	1,475	1,493	1,508	1,517	1,530	1,541	1,550	1,562	1,579
Accident Site Investigator Aide										
- State	97	139	85	189	192	194	196	199	199	199
- Alternative 1	2,180	2,187	2,213	2,225	2,240	2,262	2,276	2,289	2,306	2,324
- Alternative 2	1,037	1,037	1,047	1,055	1,064	1,074	1,081	1,186	1,098	1,102
Traffic Records										
Traffic Records Program Analyst										
- State	62	65	74	74	75	75	75	78	78	78
- Alternative 1	125	125	125	125	125	125	125	125	125	125
- Alternative 2	100	100	100	100	100	100	100	100	100	100
Traffic Records Systems Analyst										
- State	16	15	18	18	18	18	18	19	19	19
- Alternative 1	297	297	297	297	297	297	297	297	297	297
- Alternative 2	50	50	50	50	50	50	50	50	50	50

TABLE VIII

STATE NATIONAL

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Emergency Medical Services										
Emergency Medical Services Program Specialist										
- State	49	56	63	63	63	63	64	65	65	65
- Alternative 1	151	151	151	151	151	151	151	151	151	151
- Alternative 2	50	50	50	50	50	50	50	50	50	50
Emergency Medical Services Field Representative										
- State	46	60	64	64	65	65	65	66	66	66
- Alternative 1	542	546	555	561	569	581	592	603	611	624
- Alternative 2	207	208	209	211	214	220	225	227	231	231
Design, Construction, and Maintenance										
Highway Engineer--Safety										
- State	1,228	1,329	1,444	1,476	1,491	1,506	1,537	1,561	1,563	1,565
- Alternative 1	2,904	2,920	2,946	2,967	2,987	3,010	3,033	3,050	3,071	3,092
- Alternative 2	1,075	1,075	1,078	1,097	1,101	1,112	1,116	1,121	1,139	1,147
Engineering Aide--Safety										
- State	164	183	198	199	200	202	203	206	206	206
- Alternative 1	1,900	1,902	1,928	1,937	1,954	1,965	1,976	1,994	2,001	2,025
- Alternative 2	742	742	743	749	752	770	777	779	786	790
Highway Safety Site Officer										
- State	30	42	49	55	61	68	74	81	81	81
- Alternative 1	3,338	3,398	3,398	3,398	3,399	3,399	3,399	3,399	3,399	3,400
- Alternative 2	557	557	557	557	557	557	557	557	557	557
Traffic Control Devices										
- State	426	467	511	523	542	564	577	592	593	593
- Alternative 1	3,073	3,091	3,114	3,137	3,170	3,183	3,208	3,229	3,255	3,277
- Alternative 2	789	790	793	799	804	820	823	827	836	840
Engineering Aide--Traffic										
- State	202	238	270	279	287	287	298	306	316	316
- Alternative 1	2,080	2,084	2,111	2,122	2,139	2,154	2,169	2,188	2,198	2,222
- Alternative 2	495	495	495	496	497	505	510	515	519	527
Traffic Control Device Technician										
- State	358	396	425	433	477	453	462	475	475	475
- Alternative 1	1,246	1,269	1,277	1,288	1,319	1,336	1,344	1,352	1,365	1,375
- Alternative 2	506	506	508	510	511	516	520	522	528	535

TABLE IX

STATE NATIONAL

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Pedestrian Safety										
Pedestrian Safety Program Specialist										
. State	14	14	15	15	15	15	15	15	15	15
. Alternative 1	58	58	58	58	59	59	59	59	59	59
. Alternative 2	50	50	50	50	50	50	50	50	50	50
Traffic Records Program Analyst										
. State	1	3	3	3	3	3	3	3	3	3
. Alternative 1	9	9	9	9	10	10	10	10	10	10
. Alternative 2	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Program Specialist										
. State	62	80	84	85	86	87	88	88	89	90
. Alternative 1	1,254	1,254	1,254	1,254	1,254	1,254	1,254	1,254	1,254	1,254
. Alternative 2	100	100	100	100	100	100	100	100	100	100
Police Traffic Services Officer										
. State	822	976	1,010	1,034	1,058	1,081	1,102	1,126	1,133	1,140
. Alternative 1	3,448	3,553	3,576	3,604	3,631	3,664	3,685	3,709	3,737	3,766
. Alternative 2	1,174	1,175	1,189	1,198	1,203	1,211	1,220	1,228	1,237	1,252
Police Traffic Services Patrolman										
. State	26,259	31,478	35,472	37,008	38,380	39,832	41,379	42,720	42,904	42,985
. Alternative 1	110,538	111,314	112,084	112,876	113,684	114,464	115,258	116,065	116,853	177,668
. Alternative 2	37,930	38,078	38,462	38,729	39,001	39,274	39,552	39,829	40,115	40,386
Accident Cleanup										
State Wrecker Operator										
. State	38	44	50	56	62	64	64	64	64	64
. Alternative 1	9,229	9,457	9,648	9,675	9,839	9,967	10,092	10,220	10,356	10,456
. Alternative 2	3,696	3,784	3,803	3,882	3,916	3,981	4,029	4,077	4,125	4,167
State Wrecker Field Representative										
. State	4	6	6	6	6	6	6	6	6	6
. Alternative 1	143	143	144	145	147	149	150	154	156	157
. Alternative 2	55	55	55	55	55	55	55	56	57	58

TABLE X

STATE: National

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
School Bus Safety										
School Bus Program Specialist										
. State	65	78	82	82	82	83	83	88	88	88
. Alternative 1	200	200	200	200	200	200	200	200	200	200
. Alternative 2	50	50	50	50	50	50	50	50	50	50
School Bus Driver Training Officer										
. State	122	136	150	156	173	181	194	203	203	203
. Alternative 1	319	330	342	354	365	378	392	406	420	435
. Alternative 2	409	412	419	426	434	439	445	453	459	464
Motor Vehicle Inspector/Motor Vehicle Station Inspector										
. State	98	98	98	98	98	98	98	98	98	98
. Alternative 1	541	556	580	603	621	642	673	698	724	749
. Alternative 2	132	132	134	142	148	156	160	167	172	174

SAFETY MANPOWER SURVEY OF LOCAL GOVERNMENTS IN THE UNITED STATES*

This report identifies job titles and provides job descriptions for local highway safety personnel.

METHODOLOGY

Survey participants investigated county, municipality, township and school district units of government. A working sample of 207 counties was selected from the total possible 3049 county sites in the United States. To this working sample, population and geographic criteria were applied. From this 28 prime and 28 alternate sites were selected. This sample was then surveyed. Questions were asked about job titles and descriptions.

Generalized job titles were developed by grouping together those jobs whose functions were similar within each Highway Safety Standard. An example of this approach can be found in the standard: Highway Design, Construction, and Maintenance. Titles and descriptions are divided into the areas of design, construction, maintenance and administration with the titles being ranked from supervisory positions through clerical to, and including, unskilled positions.

After the site units were selected, people were interviewed, data collected, positions defined, and the information was correlated. Two figures for each were established. The first, full-time equivalency manpower, is presented in this report. The second, total manpower involvement is not presented because of the undeterminable amount of overlap for the same people involved in different positions in different highway safety standards.

OBSERVATIONS AND CONCLUSIONS

The total local safety manpower requirements by type of and key program are summarized in Tables I, II, and III. The development of the National Estimate (Table 1) was based on data acquired from field visits and recorded on the interview instruments, and on statistics presented in Bureau of Census and National Center for Educational Statistics publications.

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*Summary of *Safety Manpower Survey of Local Governments in the United States* by Mei D. Powell, F. W. Wright, Thomas M. Spratt, National Association of Counties Research Foundation, prepared for the U.S. Department of Transportation, National Highway Safety Bureau, Washington, D.C., n.d.

TABLE I

NATIONAL ESTIMATE BY PROGRAM

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Planning & Administration	182	182	182	182	182	182	182	182	182	182
Driver Education	24,619	25,408	26,223	27,062	27,928	28,822	29,744	30,696	31,679	32,692
Codes and Laws	545	545	545	545	545	545	545	545	545	545
Traffic Courts	36,106	36,026	35,946	35,868	35,790	35,712	35,634	35,558	35,482	35,407
Alcohol in Relation To Highway Safety	2,042	2,118	2,198	2,282	2,370	2,463	2,562	2,667	2,777	2,895
Indet. & Surveillance Of Accident Locations	3,777	3,912	4,052	4,196	4,345	4,501	4,661	4,828	5,001	5,179
Traffic Records	10,441	10,441	10,441	10,441	10,441	10,441	10,441	10,441	10,441	10,441
Emergency Medical Services	49,419	49,631	49,845	50,055	50,269	50,483	50,702	50,911	51,127	51,343
Highway Design, Constructc. & Maintenance	347,144	368,414	391,081	415,616	441,288	468,898	498,203	529,445	563,243	597,714
Traffic Control Devices	17,608	18,236	18,918	19,563	20,263	20,988	21,735	22,509	23,314	24,147
Pedestrian Safety	15,007	15,541	16,096	16,669	17,265	17,881	18,519	19,179	19,865	20,575
Police Traffic Services	146,536	150,165	153,963	157,943	162,016	166,393	170,986	175,808	180,874	186,158
School Bus Safety	449,817	466,910	484,652	503,069	522,186	542,031	562,628	584,008	606,200	629,236
TOTAL ----------	1,103,243	1,147,529	1,194,142	1,243,491	1,294,888	1,348,340	1,406,542	1,466,777	1,530,730	1,596,514

TABLE II

ALTERNATIVE I
BY PROGRAM

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Planning & Administration	4,925	4,957	4,989	5,021	5,053	5,085	5,117	5,149	5,181	5,213
Driver Education	44,172	45,585	47,044	48,548	50,102	51,704	53,357	55,063	56,825	58,643
Codes and Laws	4,802	4,802	4,802	4,802	4,802	4,802	4,802	4,802	4,802	4,802
Traffic Courts	77,481	78,013	78,549	79,086	79,618	80,155	80,692	81,225	81,761	82,299
Alcohol in Relation To Highway Safety	17,378	17,798	18,217	18,636	19,057	19,476	19,896	20,315	20,735	21,155
Indet. & Surveillance Of Accident Locations	17,233	17,233	17,233	17,233	17,233	17,233	17,233	17,233	17,233	17,233
Traffic Records	24,021	24,277	24,533	24,787	25,043	25,298	25,553	25,808	26,064	26,318
Emergency Medical Services	306,487	307,805	309,128	310,457	311,792	313,132	314,480	315,834	317,194	318,559
Highway Design, Construc. & Maintenance	427,331	442,994	460,120	478,878	499,453	522,068	546,953	574,375	604,629	637,491
Traffic Control Devices	20,279	21,151	22,112	23,169	24,334	25,621	27,043	28,609	30,365	32,300
Pedestrian Safety	18,883	19,427	19,991	20,523	21,176	21,779	22,443	23,109	23,800	24,514
Police Traffic Services	296,195	312,536	329,824	348,114	367,466	387,941	409,602	431,816	456,776	482,424
School Bus Safety	491,058	503,845	516,977	530,465	544,318	558,544	573,156	588,162	603,572	619,399
TOTAL	1,750,245	1,800,423	1,853,519	1,909,719	1,969,447	2,032,839	2,100,327	2,171,509	2,248,981	2,310,350

ALTERNATIVE II
BY PROGRAM

TABLE III

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Planning & Administration	1,729	1,741	1,753	1,765	1,777	1,789	1,801	1,813	1,825	1,837
Driver Education	24,619	25,408	26,223	27,062	27,928	28,822	29,744	30,696	31,679	32,692
Codes and Laws	4,802	4,802	4,802	4,802	4,802	4,802	4,802	4,802	4,802	4,802
Traffic Courts	57,006	57,542	58,079	58,612	59,149	59,685	60,218	60,755	61,292	61,824
Alcohol in Relation To Highway Safety	5,793	5,932	6,073	6,211	6,351	6,492	6,632	6,771	6,912	7,051
Indst. & Surveillence Of Accident Locations	9,072	9,072	9,072	9,072	9,072	9,072	9,072	9,072	9,072	9,072
Traffic Records	12,667	12,793	12,919	13,045	13,171	13,296	13,423	13,548	13,674	13,800
Emergency Medical Services	49,419	49,631	49,845	50,055	50,269	50,483	50,702	50,911	51,127	51,343
Highway Design, Construc. & Maintenance	353,439	365,121	377,860	391,776	397,006	423,700	442,043	450,971	484,414	508,894
Traffic Control Devices	16,013	16,802	17,673	18,636	19,702	20,884	22,196	23,652	25,270	27,070
Pedestrian Safety	16,407	16,945	17,503	18,079	18,676	19,293	19,931	20,551	21,276	21,984
Police Traffic Services	127,572	134,317	141,453	148,004	156.993	165,445	174,386	183,846	193,855	204,444
School Bus Safety	449,817	466,910	484,652	503,069	522,186	542,031	562,628	584,008	606,200	629,236
TOTAL	1,128,355	1,167,216	1,207,907	1,250,186	1,287,082	1,345,800	1,397,578	1,441,396	1,511,428	1,573959

Alternative I (Table II) provides for the maximum personnel requirement which is realistic and justifiable for each standard. Alternative 2 (Table III) provides for the minimum personnel to be required if highway safety standards are to be met at the local level. Generally, national estimates will fall somewhere within the maximum and minimum manpower range as defined by the alternatives.

Table IV provides comparisons of selected totals from the first three tables. These four tables provide some general observations about the status, growth, and distribution of local manpower requirements.

COMPARISONS OF TOTAL
ALTERNATIVE MANPOWER
REQUIREMENTS

TABLE IV

	1969	1978	Difference
ALTERNATE 1 ESTIMATE	1,750,245	2,310,350	560,105
NATIONAL ESTIMATE	1,103,243	1,596,514	493,271
DIFFERENCE	647,002	713,836	
ALTERNATE 2 ESTIMATE	1,128,355	1,573,949	445,604
NATIONAL ESTIMATE	1,103,243	1,596,514	493,271
DIFFERENCE	25,112	-22,555	

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APPENDICES

APPENDIX A

16 HIGHWAY SAFETY PROGRAM STANDARDS*

The Purpose of Each

To meet the continuing problem of traffic accidents and the deaths, injuries and property damage they cause, the federal government has joined the states in the establishment of a Nationwide Highway Safety Program.

This Federal-State Partnership distributes program responsibility through all levels and branches of government. However, the basic responsibilities for safe operation of highway traffic and for control of drivers remain with the states.

The federal role, expressed by the Congress, is one of leadership, guidance, and encouragement of improved state and local highway safety activities. This is done through the establishment (in cooperation with responsible officials throughout state and local government) of minimum national standards for state and local programs.

Listed below are the number, title, and state purpose of each the original *16 Highway Safety Program Standards.*

1. PERIODIC MOTOR VEHICLE INSPECTION

To increase, through periodic motor vehicle inspection, the l[i]lihood that every vehicle on the public highway is properly equipped and is being maintained in reasonably safe working co[n]

2. MOTOR VEHICLE REGISTRATION

To provide a means of identifying the owner and type, weight, and carrying capacities of every vehicle licensed to operate [in] the state, and to make such data available for traffic safety studies and research, accident investigation, enforcement, and other operational uses.

To provide a means for aggregating ownership and vehicle information for: a) accident research; b) planning and development streets, highways and related facilities; and c) other operational uses.

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*Printed from *16 Highway Safety Program Standards*, U.S. Department of Transportation, Federal Highway Administration, National Highway Safety Bureau, Washington, D.C.: Documentation C[o]. n.d.

3. MOTORCYCLE SAFETY

To assure that motorcycles, motorcycle operators and their passengers meet standards which contribute to safe operation and protection from injuries.

4. DRIVER EDUCATION

To insure that every eligible high school student has the opportunity to enroll in a course of instruction designed to train him to drive skillfully and as safely as possible under all traffic and roadway conditions.

To insure that commercial driver training schools achieve and maintain a corresponding level of instruction for beginning drivers with recognition of differences between the needs of adults and adolescents.

To provide education courses offering driving instruction to adults.

5. DRIVER LICENSING

To improve the quality of driving by implementing more effective and uniform licensing procedures, thereby reducing the number of accidents while increasing the efficiency of traffic flow.

6. CODES AND LAWS

To eliminate all the major variations in traffic codes, laws and ordinances with a unified overall state policy on traffic safety codes and laws, and to further the adoption of appropriate aspects of the Rules of the Road section of the Uniform Vehicle Code.

7. TRAFFIC COURTS

To provide prompt impartial adjudication of proceedings involving motor vehicle laws.

8. ALCOHOL IN RELATION TO HIGHWAY SAFETY

To broaden the scope and number of activities directed toward reducing traffic accident loss experience arising in whole or part from persons driving under the influence of alcohol.

9. IDENTIFICATION AND SURVEILLANCE OF ACCIDENT LOCATIONS

To identify specific locations or sections of streets and highways which have high or potentially high accident experience, as a basis for improvement, selective enforcement, or other operational

practices that will eliminate or reduce the hazards at the location so identified.

10. TRAFFIC RECORDS

To assure that data on traffic accidents, drivers, motor vehicles and roadways are available to provide:

1. A reliable indication of the magnitude and nature of the highway traffic accident problem on a national, state and local scale;

2. A reliable means for identifying short-term changes and long-term trends in the magnitude and nature of traffic accidents;

3. A valid basis for:

   a. The detection of high or potentially high accident locations and causes

   b. The detection of health, behavioral and related factors contributing to accident causation

   c. The design of accident, fatality and injury countermeasures

   d. Developing means for evaluating the cost and effectiveness of these measures

   e. The planning and implementation of selected enforcement and other operational programs.

11. EMERGENCY MEDICAL SERVICES

To provide emergency care system that will:

1. Provide quick identification and response to accidents;

2. Sustain and prolong life through proper first aid measures, both at the scene and in transit;

3. Provide the coordination, transportation, and communications necessary to bring the injured and definitive medical care together in the shortest practicable time, without simultaneously creating additional hazards.

12. HIGHWAY DESIGN, CONSTRUCTION, AND MAINTENANCE

To assure: a) that existing streets and highways are maintained in a condition that promotes safety, b) that capital improvements

either to modernize existing roads or to provide new facilities meet approved safety standards, and c) that appropriate precautions are taken to protect passing motorists as well as highway workers from accident involvement at highway construction sites.

13. TRAFFIC CONTROL DEVICES

To assure the full and proper application of modern traffic engineering practice and uniform standards for traffic control devices in reducing the likelihood and severity of traffic accidents.

14. PEDESTRIAN SAFETY

To emphasize the need to recognize pedestrian safety as an integral, constant and important element in community planning and all aspects of highway transportation and to insure a continuing program to improve such safety by each state and its political subdivisions.

15. POLICE TRAFFIC SERVICES

To reduce deaths and injuries by improving police traffic services in all aspects of accident prevention programs and police traffic supervision, post-accident procedures to aid crash victims and to bring those responsible for the accidents to justice.

16. DEBRIS HAZARD CONTROL AND CLEANUP

To provide for the assignment of official responsibilities and for the planning, training, coordination and communications necessary to assure the recognition, reporting, and prompt correction of conditions or incidents that constitute potential dangers; that incident sites are restored to a safe condition; and that traffic movement is expeditiously resumed.

APPENDIX B

EVALUATION

Please complete the following regarding the unit you have just completed. Your ratings and comments should be concerned with the substantive content presented.

Since this assessment is of importance to the project, please complete and return this form as soon as conveniently possible.

DIRECTIONS: On the scale provided please rate each section in this volume. A rating of 1 indicates the section was inadequate. A rating of 4 indicates that the section was adequately presented. Space is provided after each item for any comments or questions. These comments and/or questions could be, but are not necessarily limited to, the strengths and/or weaknesses of each section.

		Inadequate			Adequate
1.	General Information	1	2	3	4
	COMMENTS:				
2.	Safety Specialist Manpower Requirements	1	2	3	4
	COMMENTS:				
3.	Safety Manpower Survey of Local Governments in the United States	1	2	3	4
	COMMENTS:				

		Inadequate			Adequate
		1	2	3	4
4.	16 Highway Safety Program Standards				

COMMENTS: